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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,133	03/10/2004	Seiichi Onoue	61654US004	4938

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3M INNOVATIVE PROPERTIES COMPANY  
PO BOX 33427  
ST. PAUL, MN 55133-3427

EXAMINER
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KURTZ, BENJAMIN M

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/798,133

Applicant(s)

ONOU ET AL.

Examiner

Benjamin Kurtz

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24,27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24,27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).

2. The use of the trademark "Cartridge Klean" on page 8, paragraph [0041] has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-24 and 27-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 15 recite a bracket. The bracket appears in the specification in paragraphs [34] and [47]. Paragraph [47] only mentions an embodiment without a bracket and in paragraph [34] the bracket is described being used to secure the clamp to the filter head assembly but no mention is

made as to the bracket being slidably engaged with the filter housing head so that the sump and head may be separated from one another. Figures 1 and 15 also do not reasonably convey the bracket being slidably engaged with the head or how the bracket secures the clamp to the filter head assembly.

Claims 2-24 and 27-28 suffer from the same defect as they depend herefrom.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. US 4 839 048 in view of Entringer et al. US 6 793 818 B1. Regarding claim 1, Reed (048) discloses a filter housing system comprising: a filter-housing sump (110, 205) having a central cavity and an axial opening, the central cavity being configured and dimensioned for receiving and seating a filter media pack (201) therein; a filter housing head assembly (230) configured and dimensioned to fit on the filter housing sump (110, 205) such that axial opening is covered thereby; a clamping device (233) comprising: at least two curved members (235,236) each curved member having two ends; at least one hinge assembly (240,241), the curved members (235,236) being operatively pivotally attached to each other at one end by the hinge assembly (240,241); at least two tongue members (fig. 5) operatively positioned at the second end of the curved members (235,236); and at least one fastening device (242, 243) being

operative to force the two tongue members together such that an operator can generate sufficient torque to effectuate the seal there between (fig. 5 and 6). Reed does not teach the head assembly having a bracket. Entringer teaches a filter housing system comprising a filter housing head (10) having a bracket (50) where the bracket secures a clamping device (24) to the filter housing head assembly and is slidably engaged with the filter housing head such that the filter housing sump (30) and the filter housing head assembly are readily separated one from the other (fig. 9 and 10, col. 5, lines 23-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bracket as taught by Entringer because the latch does not allow the collar to rotate about a central axis and the sump is therefore held in place and prevented from being removed from the head (col. 3, lines 16-23).

Regarding claims 2 and 3, a radial body flange rim (225) surrounds the housing sump adjacent to the opening and has a substantially planar surface portion defined along its periphery (fig. 6); and the filter housing head assembly (230) further comprises: a radial flange rim of the housing sump when filter head assembly is operatively positioned on the housing sump (110, 205), the radial flange rim having a substantially planar surface portion define along its periphery for operatively contacting the planar surface portion (225) of the radial body flange rim when the filter head assembly is operatively connected onto the housing sump (110, 205) (fig. 6).

Regarding claims 4 and 7-10, the at least two tongues further comprise: means for receiving male (242) and female (243) fasteners which perform the identical function as the slots and bores disclosed herein in substantially the same way with substantially

the same results that the clamping device is held in place to secure the sump to the head (fig. 5); the male fastener (242) comprises: a threaded eye bolt having a threaded portion of sufficient length and a round flat head with a smaller diameter than a bore in the two tongues (fig. 5, col. 6, lines 6-19); the female fastener (243) further comprises: a threaded bore and a knob having at least two protrusions which is sufficient to generate enough torque to operate the knob (fig. 5, col. 6, lines 6-19).

Regarding claim 5, the two curved members (235,236) are configured and dimensioned to engage both the radial body flange rim and the radial flange rim when a filter media pack is installed therein and the filter head is operatively positioned on the filter housing sump such that the compression load is distributed evenly around the entire outer periphery of the radial body flange rim and the radial flange rim when the clamping device is operatively engaged (fig. 5, col. 3, lines 14-26).

Regarding claim 6, the two curved members are shaped to correspond with the profile created by the radial body flange rim and the radial flange rim (fig. 5).

5. Claims 11-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (048) in view of Entringer (818) as applied to claim 1 above, and further in view of Knuth US 3 399 776. Regarding claims 11-12, 14 Reed in view of Entringer discloses the filter housing system but does not disclose the head having a lever and piston assembly. Knuth (776) teaches a filter assembly with a head having a lever (41) and piston (40) assembly for applying pressure to the filter media pack (20), the lever (41) is pivotally mounted on the filter head and operatively associated with the piston (40) and the lever and piston assembly is configured to cooperate so that the force is

translated to the piston by the lever at a location closer to the pivotal mounting of the lever than its opposing free end (fig. 1-5, col. 2, lines 26-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the lever and piston assembly of Knuth (776) because the assembly provides a mechanism for releasing the filter unit from the head unit and to close the valve of the head unit (col. 2, lines 37-59).

6. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (048) in view of Entringer (818) in view of Knuth (776). Regarding claim 15, Reed (048) discloses a filter housing system comprising: a filter-housing sump (110, 205) having a central cavity and an axial opening, the central cavity being configured and dimensioned for receiving and seating a filter media pack (201) therein; a filter housing head assembly (230) configured and dimensioned to fit on the filter housing sump (110, 205) such that axial opening is covered thereby; a clamping device (233) comprising: at least two curved members (235,236) each curved member having two ends; at least one hinge assembly (240,241), the curved members (235,236) being operatively pivotally attached to each other at one end by the hinge assembly (240,241); at least two tongue members (fig. 5) operatively positioned at the second end of the curved members (235,236); and at least one fastening device (242, 243) being operative to force the two tongue members together such that an operator can generate sufficient torque to effectuate the seal there between (fig. 5 and 6). Reed does teach the head assembly including a bracket or a lever and piston assembly.

Entringer teaches a filter housing system comprising a filter housing head (10) having a bracket (50) where the bracket secures a clamping device (24) to the filter housing head assembly and is slidably engaged with the filter housing head such that the filter housing sump (30) and the filter housing head assembly are readily separated one from the other (fig. 9 and 10, col. 5, lines 23-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bracket as taught by Entringer because the latch does not allow the collar to rotate about a central axis and the sump is therefore held in place and prevented from being removed from the head (col. 3, lines 16-23).

Knuth (776) teaches a filter assembly with a head having a lever (41) and piston (40) assembly for applying pressure to the filter media pack (20), the lever (41) is pivotally mounted on the filter head and operatively associated with the piston (40) and the lever and piston assembly is configured to cooperate so that the force is translated to the piston by the lever at a location closer to the pivotal mounting of the lever than its opposing free end (fig. 1-5, col. 2, lines 26-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the lever and piston assembly of Knuth (776) because the assembly provides a mechanism for releasing the filter unit from the head unit and to close the valve of the head unit (col. 2, lines 37-59).

Regarding claims 16 and 17, Reed teaches a radial body flange rim (225) surrounds the housing sump adjacent to the opening and has a substantially planar surface portion defined along its periphery (fig. 6); and the filter housing head assembly



(230) further comprises: a radial flange rim of the housing sump when filter head assembly is operatively positioned on the housing sump (110, 205), the radial flange rim having a substantially planar surface portion define along its periphery for operatively contacting the planar surface portion (225) of the radial body flange rim when the filter head assembly is operatively connected onto the housing sump (110, 205) (fig. 6).

Regarding claims 18 and 21-24, Reed teaches the at least two tongues further comprise: means for receiving male (242) and female (243) fasteners which perform the identical function as the slots and bores disclosed herein in substantially the same way with substantially the same results that the clamping device is held in place to secure the sump to the head (fig. 5); the male fastener (242) comprises: a threaded eye bolt having a threaded portion of sufficient length and a round flat head with a smaller diameter than a bore in the two tongues (fig. 5, col. 6, lines 6-19); the female fastener (243) further comprises: a threaded bore and a knob having at least two protrusions which is sufficient to generate enough torque to operate the knob (fig. 5, col. 6, lines 6-19).

Regarding claim 19, Reed teaches the two curved members (235,236) are configured and dimensioned to engage both the radial body flange rim and the radial flange rim when a filter media pack is installed therein and the filter head is operatively positioned on the filter housing sump such that the compression load is distributed evenly around the entire outer periphery of the radial body flange rim and the radial flange rim when the clamping device is operatively engaged (fig. 5, col. 3, lines 14-26).

Regarding claim 20, Reed teaches the two curved members are shaped to correspond with the profile created by the radial body flange rim and the radial flange rim (fig. 5).

Regarding claim 28, Knuth further teaches the lever and piston assembly is configured to cooperate so that the force is translated to the piston by the lever at a location closer to the pivotal mounting of the lever than its opposing free end (fig. 1-5, col. 2, lines 26-59).

7. Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (048) in view of Entringer (818) in view of Knuth (776) as applied to claims 11 and 15 above, and further in view of Reid et al. U.S. Patent No. 5,744,030. Reed (048) in view of Entringer in view of Knuth (776) teaches the filter housing system with a lever and piston assembly but does not teach the piston being slidable. Reid (030) teaches a filter assembly with a lever (114) and piston (112) assembly wherein the piston (112) is mounted for slidable movement extending from the exterior of the filter head to the interior of the filter housing to contact the filter media (fig. 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lever and piston assembly with that of Reid (030) because the piston (112) prevents an accidental counter-rotation of the filter cartridge (col. 7, lines 34-35).

#### ***Response to Arguments***

8. The previous 35 U.S.C. §112 rejection has been withdrawn in view of the applicant's amendment.

9. Applicant's arguments with respect to claims 1 and 15 have been considered but are moot in view of the new ground(s) of rejection. Reed (048) teaches all of the claims limitations of claim 1 but does not teach the bracket as claimed. Entringer (818) teaches a filter housing system comprising a filter housing head (10) having a bracket (50) where the bracket secures a clamping device (24) to the filter housing head assembly and is slidably engaged with the filter housing head such that the filter housing sump (30) and the filter housing head assembly are readily separated one from the other (fig. 9 and 10, col. 5, lines 23-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bracket as taught by Entringer because the latch does not allow the collar to rotate about a central axis and the sump is therefore held in place and prevented from being removed from the head (col. 3, lines 16-23).

Regarding claim 15, Reed (048) in view of Knuth (776) teaches the filter assembly with the lever and piston assembly but do not teach the bracket. Entringer teaches a filter housing system comprising a filter housing head (10) having a bracket (50) where the bracket secures a clamping device (24) to the filter housing head assembly and is slidably engaged with the filter housing head such that the filter housing sump (30) and the filter housing head assembly are readily separated one from the other (fig. 9 and 10, col. 5, lines 23-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bracket as taught by Entringer because the latch does not allow the collar to rotate about a central axis

and the sump is therefore held in place and prevented from being removed from the head (col. 3, lines 16-23).

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Kurtz whose telephone number is 571-272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bk 9/22/06

  
W. L. WALKER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700